

ABSTRACT

A single chip integrated circuit wireless data processor demodulates N separate data signals from M separate antennas simultaneously. The multi-antenna processor can be coupled to a baseband processor on the IC, so that it responds to changing channel conditions between two access points, and selectively kicks in if there is noise, interference, frequency fading, a need for an enhanced data rate, a need for an increased operating range, etc. to improve a performance of the baseband processor.